18652 - Quickguide Quantec Power supply box (TuFu Box) for up to 8 tower lights (en)

The Quantec Power supply box (TuFuBox) combines 8 terminals in a compact housing to supply up to eight Connectboxes (Maxi) for up to 8 tower lights or for up to 4 tower lights, each with redundant light.

Figure: Quantec TuFu Box

Key features

- Compact design
- Supply of up to 8 Connectboxes in series connection with up to 8 tower lights or up to 4 tower lights each with redundant light
- Reporting of each individual fault for precise localisation
- Wire-saving system of the tower line (supply and communication)
- Integrated overvoltage protection

General safety information for Quantec products

NOTICE

Before operating, installing or maintaining the product, you must carefully read and understand these instructions, in particular the safety instructions and warnings.

Only **electrically** instructed, trained and authorised personnel may operate, install or maintain the product.
If you have any questions, please contact the manufacturer.

These instructions must be kept to hand at all times.

NOTICE

Repairs may only be carried out by the manufacturer or by personnel authorised by the manufacturer. Any unauthorised modification or replacement of components may impair the safe operation of the product.

The housing must remain closed. Otherwise the tightness may be impaired!

Technical specifications

General

Item numbers	• 18652 - Power supply box for up to 8 QF tower lights
Terminal blocks for	• up to 8 Quantec Connectboxes connected in series • Power supply • Brightness sensor (optional with Sync) • Collective error message
Conformity	CE, RoHS
Standarts	EMC, IEC

Electrical specification

Rated voltage	85 to 305V AC / 47 to 440Hz
Rated current (output)	6.3 A (nom. 230 V AC looped) / 0.2 A (24 V DC for communication bus)
Overvoltage protection	Class III according to DIN EN IEC 61400-24

Physical characteristics

Dimensions (H × W x D)	118 mm x 239 mm x 100 mm
Weight	Approx. 1.100 g
IP rating	IP 66
Material	Polyester (housing), polyamide (cable glands), nickel-plated brass (diaphragm), stainless steel A2 (screws), PUR (seal)
Mounting	Mounting holes

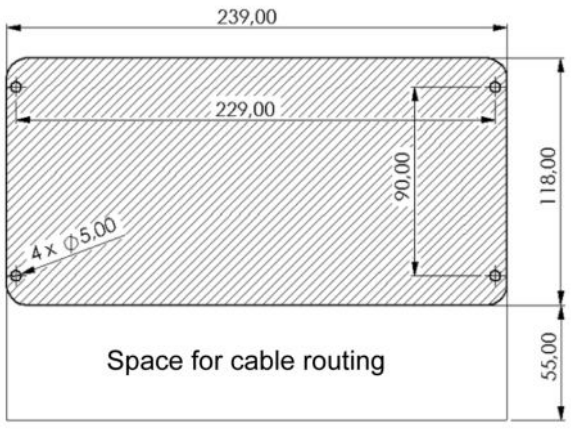

Figure: Drilling pattern Quantec Power supply box (TuFuBox)

Protection against electrostatic discharge

NOTICE

Electrostatic sensitive components!

Electrostatic discharges can cause immediate or latent damage to electronic circuits. Quantec Signals products are well protected against electrostatic discharge when used properly. Touching or removing parts, inserting objects into the housing or tampering with the connectors can lead to damage.

To avoid electrostatic discharges, only handle parts that are sensitive to electrostatic discharges in sufficiently earthed and protected areas/working environments. If this is not possible, ground yourself before touching components or connections on the housing of the device.

Grounding

WARNING

Electrical Hazards!

Ensure that the device is properly earthed.

If the connected devices are not properly earthed, dangerous voltages may occur on the devices in the event of a lightning strike!

Electric shocks caused by lightning strikes can result in death or serious injury.

- The enclosure of the switch cabinet must be correctly earthed.
- Do not connect/disconnect the cable while the appliance is switched on!

Environmental specification

Operating temperature	-40 °C to +55 °C (-40 °F to 131 °F)
Storage temperature	-55 °C to +70 °C (-67 °F to 158 °F)
Relative humidity	0 to 100 %
Operating altitude	0 to 2500 m (0 to 8202 ft) AMSL

Terminal block X1 (mains)

The Terminal block X1 is used for the power supply.

X1	Signal	Function
1	L_IN	Supply
2	N_IN	
3	PE	Earth
4	SHLD	Shield

Terminal block X2

The Terminal block X2 provides a collective error message (error in the power supply, error on the tower lights or error in the entire system).

X2	Signal	Function
1	NO	
2	NC	
3	COM	
4	PE	Earth
5	SHLD	Shield

Terminal block X3

This terminal block is used to connect the brightness sensor.

X3	Cable core	Function
1	BN	Sync
2	WH	+24 V
3	BL	0-10 V Brightness
4	BK	GND